Title (en)

Gas cabinet

Title (de)

Gaskabinett

Title (fr)

Cabinet de gaz

Publication

EP 1835222 B1 20090513 (DE)

Application EP 07005328 A 20070315

Priority

DE 102006013942 A 20060317

Abstract (en)

[origin: EP1835222A1] Gas cabinet used in the semiconductor industry, comprises housing (1) in which a gas bottle (9) that is accommodated, is attached to duct system, an inlet port, an outlet port, a flow displacement hollow body, a recess, and an inert gas connection. The duct system is present in the housing and lies in a flow of scavenging air, which enters into the housing through the inlet port and leaves the housing through the outlet port. The housing exhibits a range with a correspondingly reduced cross-section for the delimitation of the flow cross-section. The gas cabinet useful in the semiconductor industry, comprises housing (1) in which a gas bottle (9) that is accommodated, is attached to duct system, an inlet port, an outlet port, a flow displacement hollow body, a recess, and an inert gas connection. The duct system is present in the housing and lies in a flow of scavenging air, which enters into the housing through the inlet port and leaves the housing through the outlet port. The housing exhibits a range with a correspondingly reduced cross-section for the delimitation of the flow cross-section. The gas cabinet is designed in such a manner that the free-flow cross-section of the scavenging air is limited in the housing to a quantity that is needed for a reliable purification. The flow displacement hollow body is accommodated for the delimitation of the flow cross-section in the housing, exhibits the inert gas connection for its purification, exhibits unequal cross-section along its height, and extends up to the region of the gas bottle. In the housing two flow displacement bodies that face one another with an intermediate distance between them are intended. Both the flow displacement hollow bodies protrude into the region of the gas bottle and are provided respectively at their sides facing the gas bottle with the recess, into which the gas bottle protrudes. The recesses in both the flow displacement bodies have the same size. One of the flow displacement bodies is longer in the direction of flow of the scavenging air than the other flow displacement body. The longer flow displacement hollow body has a smaller cross-section in the segment facing the other flow displacement body than in the rest of the segment. The flow displacement body partially separates two flow spaces for scavenging air. Both the flow spaces are separable from each other by closable inlet ports.

IPC 8 full level

F17C 13/08 (2006.01); F17C 13/12 (2006.01)

CPC (source: EP US)

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US9222407B2; WO2014074968A1

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